Landscape Conservation Cooperatives

Frequently Asked Questions

What are landscape conservation cooperatives (LCCs)?

Landscape conservation cooperatives, or LCCs, are self-directed, applied conservation science partnerships that will drive success at landscape scales. Collectively they create a seamless, national network of interdependent partnerships between the U.S. Fish and Wildlife Service, the U.S. Geological Survey, other federal agencies, states, tribes, NGOs, universities and other entities which will inform resource management decisions to address national-scale stressors, including climate change.

LCCs provide scientific and technical support for landscape-scale conservation in the adaptive management framework. In addition, they are closely integrated with Regional Climate Change Response Centers to conduct site-specific climate impact studies and develop landscape-scale conservation plans.

What are the primary functions of an LCC?

Landscape conservation cooperatives:

 Support biological planning, conservation design and adaptive management.

- Share information and data, improve products, and prioritize and coordinate research.
- Design inventory and monitoring programs.
- Help partners identify common goals and priorities to target the right science in the right places for efficient and effective conservation.
- Support landscapes capable of sustaining abundant, diverse and healthy populations of fish, wildlife and plants.
- Provide a strong link between science and conservation delivery.
- Continue to take advantage of state-of-the-art technology and cutting edge science that is peer reviewed.
- Build upon explicit biological management priorities and objectives, and science available from existing partnerships.
- Regularly evaluate the effectiveness of scientific information and conservation actions.

- Maintain scientific credibility and provide support for management decisions by publishing new methods, controversial findings and other noteworthy products in peerreviewed journals.
- Focus primarily on priority species and habitats, identified by the partnership.
- Provide a forum for continuous exchange and feedback among partners, scientists, bio-climate modelers and fish, wildlife and habitat managers.

Landscape conservation cooperatives do not:

- Deliver on-the-ground conservation. That's up to the Service, the states and other partners.
- Focus solely on climate adaptation.
 They provide science support for conservation actions addressing a variety of broad-scale challenges including water scarcity, spread of invasive species and wildlife disease.
- Replace existing science capacities. Rather, LCCs complement and build on current science and conservation work.

Do all LCCs share common core functions, governance and structure?

For landscape conservation cooperatives to function as a national framework, and ultimately, an international model for collaborative landscape conservation, consistency in common core functions, governance structure and function is essential. Each LCC will have either on staff or through contract:

An LCC communications specialist



 $Land scape\ conservation\ cooperative\ partnerships\ strategically\ link\ science\ with\ conservation\ actions.$

- A steering committee of executive and management level representatives from partner organizations, which will provide management direction and set priorities;
- An LCC coordinator;
- A science and technology coordinator;
- GIS capability;
- Population modeling capability;
- Monitoring and evaluation capability; and
- Decision analysis expertise.

What are some LCC products and services?

With a clear focus on modeling, conservation design, decision-support and evaluation of monitoring data, landscape conservation cooperatives provide unique support for effective adaptive management by agencies and other partners. Some of the products and services that LCCs produce include:

- Integrated data for seamless spatial modeling of species and habitats, within and across geographic area boundaries;
- Explicit and measurable biological objectives, focusing on population objective variables;
- Population modeling linking fish, wildlife, and plant populations to habitat and other limiting factors;
- Identification of areas of converging and overlapping climate and non-climate stressors;

 Application of downscaled climate models to predict effects on fish and wildlife;

- Predicted ranges of native species and invasive species under temperature and precipitation projections;
- Vulnerability assessments for fish, wildlife, plants, and their habitats;

- Conservation strategies that spatially integrate biological objectives for species groups, management practices, and ecological functions and processes;
- Monitoring and assessments to predict the ability of the landscape to support and sustain priority fish and wildlife populations;
- Decision support systems and tools that help define what is needed, how much is needed, and where;
- Short- and long-term adaptation approaches at spatial scales meaningful to natural resources and partner interests;
- Maps of potential corridors linking present and future habitat, incorporating considerations of conservation genetics;
- Evaluation of genetic consequences of habitat fragmentation on small populations;
- Identification of high-priority research and technology needs.

How will LCCs work?

The Service intends to play key leadership and catalyst roles in developing each LCC by assisting in initial planning, partner coordination, assembling core staff and meeting associated needs for operational support. The partnership will determine responsibilities for further funding core science, administrative and management functions. Partners may fund some positions or provide



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in-kind services, but neither is required for participation.

- Core staff may be co-located within a partner facility, while complimentary staff may participate virtually from remote locations. Funding for staff may come from multiple sources.
- The LCC coordinator will facilitate the link between science and management as well as providing day-to-day leadership and direction of the LCC staff and partnership.
- All staff positions, including the coordinator, may be supported through any LCC partner, or shared between partners.
- LCC scientists will share their expertise both within and across LCCs by participating in local and national training and mentoring programs.
- Staff may be added in phases as the LCC matures and demand for LCC products and services change and grow.

For more information on landscape conservation cooperatives and the U.S. Fish and Wildlife Service's landscape conservation work with partners, visit http://www.fws.gov/science/shc/index.html



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American Wigeon Drake

Donna Dewhurst/FWS